

James Scarola Vice President Harris Nuclear Plant

SERIAL: HNP-03-006 10CFR50.90

Ann

United States Nuclear Regulatory Commission ATTENTION: Document Control Desk Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT DOCKET NO. 50-400/LICENSE NO. NPF-63 REQUEST FOR LICENSE AMENDMENT – RESPONSE TIME TESTING ELIMINATION SUPPLEMENTAL INFORMATION

Dear Sir or Madam:

In a letter dated August 30, 2002 and in accordance with the Code of Federal Regulations, Title 10, Part 50.90, Progress Energy Carolinas, Inc. (PEC, alternately Carolina Power & Light Company) requested a revision to the Technical Specifications (TS) for the Harris Nuclear Plant (HNP). The proposed amendment revises Technical Specifications Definitions 1.13, Engineered Safety Features (ESF) Response Time and 1.29, Reactor Trip System (RTS) Response Time. Also proposed in this change request are revisions to Surveillance Requirements 4.3.1.2 and 4.3.2.2 and BASES Sections B 3 /4.3.1 and B 3 /4.3.2. These changes will revise the definition and surveillance requirements for response time testing of the Engineered Safety Feature Actuation System (ESFAS) and the Reactor Trip System.

This letter provides additional information to supplement the information provided in the amendment requested in letter HNP-02-113 dated August 30, 2002, the letter HNP-02-141 dated November 21, 2002, and letter HNP-02-162 dated December 16, 2002. Attachment 1 provides additional information that may prove useful as the NRC evaluates the referenced license amendment request.

In accordance with 10 CFR 50.91(b), PEC is providing the State of North Carolina with a copy of the proposed license amendment.

Please refer any questions regarding this submittal to Mr. J. R. Caves at (919) 362-3137.

Sincerely, James Jarola

RTG

Attachment:

1. Supplemental information/data in support of the License Amendment request.

P.O. Box 165 New Hill, NC 27562

T> 919.362.2502 F> 919.362.2095 James Scarola, having been first duly sworn, did depose and say that the information contained herein is true and correct to the best of his information, knowledge and belief, and the sources of his information are employees, contractors, and agents of Progress Energy Carolinas, Inc.

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Mr. J. B. Brady, NRC Sr. Resident Inspector Ms. Beverly Hall, Section Chief, Radiation Protection Section, N.C. DENR Mr. C. P. Patel, NRC Project Manager Mr. L. A. Reyes, NRC Regional Administrator

Second Parage Para La Sala

SHEARON HARRIS NUCLEAR POWER PLANT NRC DOCKET NO. 50-400/LICENSE NO. NPF-63 REQUEST FOR LICENSE AMENDMENT FOR RESPONSE TIME TESTING ELIMINATION FROM TECHNICAL SPECIFICATIONS

SUPPLEMENTAL INFORMATION

Background

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The following comments provide additional information that may be helpful in the evaluation of the Harris Nuclear Plant (HNP) license amendment submittal:

1. HNP stated in the original submittal HNP-02-113, in note 2 of the "Notes Applicable to Tables 1 and 2" that "WCAP-13632, Revision 1, did not provide an allocated response time for Rosemount 1154 instruments. To obtain the baseline value as directed in Table 9-1 of WCAP-13632-P-A, Revision 2, the previous response times of all the 1154 instruments were reviewed. The most conservative value was obtained in 9/28/95 and 4/28/00. This value was 0.44 seconds."

This wording regarding Rosemount transmitters should be revised to:

"WCAP-13632, revision 2, did not provide an allocated response time for Rosemount 1154 or 1153 instruments. HNP uses these model Rosemount transmitters for three functions that require response time testing. This includes RC Flow (Model 1154HP5RA), Pressurizer Pressure (Model 1154SH9RA), and RWST Level (Model 1153DB5RA). To obtain baseline data as directed in Table 9-1 of WCAP-13632-P-A, Revision 2, the previous response times of all the 1153 and 1154 instruments were reviewed. The longest time of 0.44 seconds was obtained for a pressurizer pressure transmitter on 9/28/95 and 4/28/00. HNP performed a 95/95 statistical analysis of this data from RO3 through RO10. For each Rosemount transmitter model a separate 95/95 analysis of the hydraulic ramp data and the noise analysis data was performed. The more conservative response time result from the two testing methods based on a 95/95 analysis was used for the allocated times in the Table for each Rosemount model. Based on the results of this analysis, the following response times are allocated for each Rosemount model transmitter:

Model 1154HP5RA	0.15 seconds
Model 1154SH9RA	0.54 seconds
Model 1153DB5RA	0.48 seconds

HNP has chosen to use the above sensor time allocation for the Barton and Rosemount models listed above."

Also the sensor times provided in Tables 1 and 2 of this submittal should be revised to reflect the above times for the Rosemount transmitters.

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2. Replace the existing wording in the supplemental submittal HNP-02-141, Item 6, with the following:

"WCAP-13632, revision 2, did not provide an allocated response time for Rosemount 1154 or 1153 instruments in Table 9-1. Per section 9 of this WCAP this column should be filled using the most conservative data obtained from either previous plant insitu response time testing or, if replacing the transmitter, the response time obtained through testing. The HNP uses these model Rosemount transmitters for three functions that require response time testing. This includes RC Flow (Model 1154HP5RA), Pressurizer Pressure (Model 1154SH9RA), and RWST Level (Model 1153DB5RA). To obtain baseline data as directed in Table 9-1 of WCAP-13632-P-A, Revision 2, the previous response times of all these 1153 and 1154 instruments were reviewed. The longest time of 0.44 seconds was obtained for a pressurizer pressure transmitter on 9/28/95 and 4/28/00. HNP performed a 95/95 statistical analysis of this data from RO3 through RO10. For each Rosemount transmitter model a separate 95/95 analysis of the hydraulic ramp data and the noise analysis data was performed. The more conservative response time result from the two testing methods based on a 95/95 analysis was used for the allocated times in the Table for each model. Based on the results of this analysis, the following response times are allocated for each Rosemount model transmitter:

Model 1154HP5RA Model 1154SH9RA	0.15 seconds 0.54 seconds

- 3. In HNP supplemental submittal HNP-02-162, the following changes should be made:
 - The last two sentences of Table Note 1 should be deleted.
 - The third sentence from the end of the paragraph in Table Note 3 regarding the 0.194 second upper limit time should be deleted.
 - In the General Notes section, Note 1, the first portion of the first sentence should be revised to state: "In addition to the bases provided for selection of the 0.54 seconds for the Rosemount transmitter pressurizer pressure bounding response time proposed for HNP...."